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10/727,215	12/03/2003	Ahmad H. Tawil	016295.1505	5431
23640 7590 11/14/2008 BAKER BOTTS, LLP 910 LOUISIANA HOUSTON, TX 77002-4995				
EXAMINER				
FRITZ, BRADFORD F				
ART UNIT		PAPER NUMBER		
2441				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

debbie.allen@bakerbotts.com

Office Action Summary

Application No.

10/727,215

Applicant(s)

TAWIL, AHMAD H.

Examiner

BRADFORD F. FRITZ

Art Unit

2441

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-16,18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-16,18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF008)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8/04/2008 have been fully considered but they are not persuasive.
2. In the remarks, applicant argued in substance that:

(A) Prior art does not teach that "each storage unit that is assigned to a host computer is for use by the applications identified to the storage unit by the associations that contain respective storage unit identifiers for each assigned storage unit."

As to point (A), In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*each storage unit that is assigned to a host computer is for use by the applications identified to the storage unit by the associations that contain respective storage unit identifiers for each assigned storage unit*") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Not only is the phrase above not claimed, the phrase is also unclear and indefinite, specifically is it unclear as to whether the host computer is available for use by the identified applications or if it is intended that each assigned storage unit is available for use by the identified applications.

Nevertheless, Swank teaches assigning storage units (LUNs) to specific hosts, once assigned, the LUN can only be used by those operating systems identified on the assigned hosts (column 37, lines 25-35 and Fig. 17).

(B) Prior art does not teach an application identifier because Swank displays the attributes of a LUN which include the host name, the host operating system, and the associated IP addresses. The Applicant argues that "the attributes of a selected LUN as discussed in Swank are no the same as assigning a storage unit, based at least in part on associations, to a host computer for use only by an application identified by the application identifier of that host computer."

As to point (B), The Examiner respectfully disagrees. The Examiner notes that Swank teaches assigning hosts to a LUN, and the LUN or the Hosts are available for use by the Host's operating system, which is a type of application (column 37, lines 25-35 and Fig. 17). The assigned LUN can only be used or "*operable for use*" by those hosts' operating systems, until there is a re-assignment. After assignment the Operating Systems of the assigned Hosts are identified ("*application identifiers*" see Fig. 17, *the items in box 106*) to the LUN as the LUN's new attributes (column 37, lines 25-35).

(C) Prior art does not teach assigning a storage unit to a host based on the associations as provided in the present invention.

As to point (C), in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., assigning a storage unit to a host based on the associations) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The Examiner notes that the claims do not require a conditional statement (i.e. assigning a host to a LUN based on an association). Given the broad claim language, the claims merely require that a storage unit is assigned to a host, that an application is identified and that there are associations. Again, the claims do not require that different assignments are made based on different associations. Swank reads on the claims because Swanks assigns LUNs to Hosts, and that assignment forms many different identified associations (e.g. LUN-to-host name association, LIN-to-host IP address association, LUN-to-host operating system associations, as detailed in column 37, lines 25-35 and Fig. 17).

Claim Rejections - 35 USC § 112

3. Claims 1, 3-7, 9-16, 18, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner notes that any claim rejected and not specifically addressed is rejected because of the claim's dependency on a specifically addressed claim.

4. Regarding claim 1, contains the phrase "...one or more application identifiers" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).
5. Regarding claim 1, contains the phrase "...one or more associations" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).
6. Regarding claims 1, 7, 16, 18, and 20, contains the phrase "...one or more rows" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).
7. Regarding claims 1, 16, and 18 contains the phrase "...one or more application identifiers" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).
8. Regarding claims 7 and 14, contains the phrase "...one or more storage units" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).
9. Regarding claims 13 and 14, contains the phrase "...assigning one or more of the one or more storage unites" renders the claim(s) indefinite because the phrase

presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).

10. Regarding claim 16, contains the phrase "...one or more host computers having one or more applications" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).

11. Regarding claim 16, contains the phrase "...one or more applications" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).

12. Regarding claims 16 and 18, contains the phrase "...one or more host connections" renders the claim(s) indefinite because the phrase presents uncertainty or ambiguity with respect to the question of scope or clarity of the claims, thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(h).

Claim Rejections - 35 USC § 101

13. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

14. Claims 18 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

15. Claim 18 is directed to non-statutory subject matter because it just a computer program (i.e., software per se), which fails to establish a statutory category of invention.
16. Claim 18 is directed to non-statutory subject matter because it merely a data structure with non-functional descriptive data (i.e., just data listings) which fails to establish a statutory category of invention.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claims 1, 3-7, 9-16, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Swank (6,697,924).
19. Regarding claims 1 and 18, Swank disclosed associating with an association module one or more application identifiers and one or more storage unit identifiers to form one or more associations (column 3, lines 40-67 and Fig.17-18), each application identifier identifying an application of a host computer (column 3, lines 40-67 and Fig.17-18), each storage unit identifier identifying a storage unit of the information handling system (column 3, lines 40-67 and Fig.17-18); and for each of the one or more associations (column 3, lines 40-67 and Fig.17-18), assigning each storage unit

identified by each storage unit identifier to each host computer having the application identified by each associated application identifier (column 3, lines 40-67 and Fig.17-18), wherein each storage unit is operable for use by an application that has been identified to the storage unit (column 3, lines 40-67 and Fig.17-18), wherein the association module includes a mapping table having one or more rows (column 3, lines 40-67 and Fig.17-18), each row of the mapping table including a storage unit identifier (column 3, lines 40-67 and Fig.17-18), and an application identifier (column 3, lines 40-67 and Fig.17-18), each row of the mapping table forming an association of a storage unit and an application (column 3, lines 40-67 and Fig.17-18)..

20. Regarding claim 7, Swank disclosed associating an application identifier and a storage unit identifier to form an association (column 3, lines 40-67 and Fig.17-18), each application identifier identifying an application of a host computer (column 3, lines 40-67 and Fig.17-18), each storage unit identifier identifying a storage unit of the information handling system (column 3, lines 40-67 and Fig.17-18); receiving at one of the one or more storage units (column 3, lines 40-67 and Fig.17-18), a request from a host (column 8, lines 37-56), the request including a request application identifier (column 8, lines 37-56 and Fig.17-18); and permitting access to the one of the one or more storage units for use by an application associated with the request application identifier if the identifier of the one of the one or more storage units (column 3, lines 40-67 and Fig.17-18), and the request application identifier have an association in the association module (column 3, lines 40-67 and Fig.17-18), wherein the association module includes a mapping table having one or more rows (column 3, lines 40-67 and Fig.17-18), each

row of the mapping table including a storage unit identifier (column 3, lines 40-67 and Fig.17-18), and an application identifier (column 3, lines 40-67 and Fig.17-18), each row of the mapping table forming an association of a storage unit and an application (column 3, lines 40-67 and Fig.17-18).

21. Regarding claim 14, Swank disclosed booting the host computer (column 14, lines 46-55 and column 59, lines 4-15), the host computer including an application (column 14, lines 46-55 and column 59, lines 4-15), the application having an application identifier (column 3, lines 40-67 and Fig.17-18); selecting an application identifier (column 3, lines 40-67 and Fig.17-18); assigning one or more of the one or more storage units to the host (column 3, lines 40-67 and Fig.17-18), the assigned one or more storage units being associated through an association module with the application identifier to form an association (column 3, lines 40-67 and Fig.17-18), wherein each storage unit assigned is operable for use by an application that has been identified to the storage unit and wherein the association module includes a mapping table having one or more rows (column 3, lines 40-67 and Fig.17-18), each row of the mapping table including a storage unit identifier (column 3, lines 40-67 and Fig.17-18), and an application identifier (column 3, lines 40-67 and Fig.17-18), each row of the mapping table forming an association of a storage unit and an application (column 3, lines 40-67 and Fig.17-18), and installing the application on the host computer (column 59, 4-15 and 74, lines 1-13).

22. Regarding claim 16, Swank disclosed one or more host computers having one or more applications (column 3, lines 40-67 and Fig.17-18), each of the one or more

applications having an application identifier (column 3, lines 40-67 and Fig.17-18); a storage medium interfaced with the one or more host computers (column 3, lines 40-67 and Fig.17-18), the storage medium including one or more storage units (column 3, lines 40-67 and Fig.17-18), each storage unit having a storage identifier (column 3, lines 40-67 and Fig.17-18); an association module associating one or more application identifiers and one or more storage unit identifiers to form an association (column 3, lines 40-67 and Fig.17-18), wherein the association module includes a mapping table having one or more rows (column 3, lines 40-67 and Fig.17-18), each row of the mapping table including a storage unit identifier (column 3, lines 40-67 and Fig.17-18), and an application identifier (column 3, lines 40-67 and Fig.17-18), each row of the mapping table forming an association of a storage unit and an application (column 3, lines 40-67 and Fig.17-18); a control module in communication with the storage medium and the one or more host connections (column 3, lines 40-67 and Fig.17-18), the control module performs operations comprising: associating one or more application identifiers and one or more storage unit identifiers to form an association (column 3, lines 40-67 and Fig.17-18); and for each association (column 3, lines 40-67 and Fig.17-18), assigning each storage unit identified by each storage unit identifier to each host having the application identified by each associated application identifier (column 3, lines 40-67 and Fig.17-18), wherein each storage unit assigned is operable for use only by each identified application (column 3, lines 40-67 and Fig.17-18).

23. Regarding claims 3 and 9, Swank disclosed each application identifier includes a node name and a port name of a host bus adapter of the host computer having the

application identified by the application identifier (column 45, lines 1-20 and column 58, lines 38-67).

24. Regarding claims 4, 5, 10, and 11, Swank disclosed the node/port name includes a World-Wide Name (WWN) (column 31, lines 40-65 and column 59, lines 5-15).

25. Regarding claims 6 and 12, Swank disclosed wherein the storage unit identifier includes a logical unit number (LUN) (column 59, lines 24-37 and Fig. 17-18).

26. Regarding claim 13, Swank disclosed selecting an application identifier (column 3, lines 40-67 and Fig.17-18); and assigning one or more of the one or more storage units to the host computer having the application identified by the application identifier (column 3, lines 40-67 and Fig.17-18).

27. Regarding claim 15, Swank disclosed booting the host computer (column 59, lines 4-25); selecting an application identifier (column 3, lines 40-67 and Fig.17-18), the application identifier being associated with a desired application (column 3, lines 40-67 and Fig.17-18); configuring the host computer to include the application identifier (column 3, lines 40-67 and Fig.17-18); and booting the host computer (column 59, lines 4-25).

28. Regarding claim 20, Swank disclosed a mapping table having one or more rows (column 3, lines 40-67 and Fig.17-18), each row of the mapping table including a storage unit identifier and an application identifier (column 3, lines 40-67 and Fig.17-18), each row of the mapping table forming an association of a storage unit identified by the storage identifier and a host having the application identified by each associated application identifier (column 3, lines 40-67 and Fig.17-18).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRADFORD F. FRITZ whose telephone number is (571)272-3860. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Caldwell/
Supervisory Patent Examiner, Art
Unit 2442

/B. F. F./
Examiner, Art Unit 2441